

#### ABSTRACT

The mutual difference of the diameters of the balls 17, 17 incorporated into a bearing unit for supporting a wheel is set to be not more than  $1.5\text{ }\mu\text{m}$  (preferably to be not more than  $1.0\text{ }\mu\text{m}$ ). Finishing work is conducted on both sides of the disk 2 under the condition that the bearing unit for supporting a wheel is assembled and further this disk 2 is attached to the attaching flange 13 of the bearing unit for supporting a wheel. Due to the foregoing, the whirl of the hub 8 with respect to the outer ring 6 caused by the revolution of the balls 17, 17 can be suppressed, and at the same time an influence of the error of each portion can be eliminated. Therefore, the deflection of both sides 24, 24 of the disk 2 can be suppressed to be a sufficiently low value of not more than  $35\text{ }\mu\text{m}$  (preferably not more than  $25\text{ }\mu\text{m}$ ).